

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) An apparatus comprising:

a first circuit configured to generate a second reference signal in response to (i) a first reference signal and (ii) a timing signal, wherein (a) a frequency and a phase of said second reference signal are (i) adjusted in response to said first reference signal and (ii) held when said first reference signal is lost and (b) said first reference signal comprises an external timing signal, wherein said first circuit comprises ~~(i)~~ a digitally controlled reference loop circuit, ~~(ii)~~ comprising a control circuit configured to generate a control signal in response to said first and second reference signals, ~~and (iii)~~ wherein said control signal is held when said first reference signal is lost;

a second circuit configured to generate one or more output signals in response to said second reference signal and one of said one or more output signals, wherein said one or more output signals have a controlled and/or substantially zero delay with respect to said first reference signal; and

an oscillator configured to generate said second reference signal in response to said control signal and said timing signal.

2. (CANCELED) .

3. (ORIGINAL) The apparatus according to claim 1,  
wherein said second circuit comprises:

a phase locked loop (PLL) circuit configured to generate  
a clock signal in response to said second reference signal and said  
5 one of said one or more output signals; and

a buffer circuit configured to generate said one or more  
output signals in response to said clock signal.

4. (ORIGINAL) The apparatus according to claim 3,  
wherein said second circuit further comprises a divide-by-N circuit  
configured to divide said one of said one or more output signals.

5. (ORIGINAL) The apparatus according to claim 3,  
wherein said PLL circuit comprises an analog PLL circuit.

6. (CANCELED) .

7. (CURRENTLY AMENDED) The apparatus according to claim  
2 1, wherein said oscillator comprises a voltage controlled crystal  
oscillator (VCXO) .

8. (CURRENTLY AMENDED) The apparatus according to claim 2 1, wherein said oscillator is an oscillator selected from the group consisting of voltage controlled oscillators (VCOs), current controlled oscillators (ICOs), digitally controlled oscillators, 5 digitally controlled crystal oscillators, LC oscillators, RC oscillators, and ring oscillators.

9. (CANCELED).

10. (ORIGINAL) The apparatus according to claim 5, wherein said first circuit further comprises a phase detector circuit configured to adjust a phase of said second reference signal in response to said first and second reference signals.

11. (ORIGINAL) The apparatus according to claim 1, wherein said first circuit further comprises a divide-by-N circuit configured to divide a frequency of said first reference signal.

12. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is implemented on a single integrated circuit chip.

13. (CURRENTLY AMENDED) An apparatus for generating one or more output signals comprising:

means for generating a second reference signal in response to (i) a first reference signal and (ii) a timing signal, wherein (a) a frequency and a phase of said second reference signal are (i) adjusted in response to said first reference signal and (ii) held when said first reference signal is lost and (b) said ~~first~~ second reference signal comprises ~~an external timing a~~ crystal oscillator signal; and

means for generating said one or more output signals in response to said second reference signal and one of said one or more output signals, wherein said one or more output signals have controlled and/or substantially zero delay with respect to said ~~first~~ second reference signal, wherein said apparatus is implemented on a single integrated circuit chip.

14. (CURRENTLY AMENDED) A method of generating one or more output signals comprising the steps of:

(A) generating a second reference signal in response to (i) a first reference signal and (ii) a timing signal, wherein (a) a frequency and a phase of said second reference signal are (i) adjusted in response to said first reference signal and (ii) held when said first reference signal is lost and (b) said second reference signal comprises a crystal oscillator signal; and

(B) generating said one or more output signals in response to said second reference signal and one of said one or

more output signals, wherein said one or more output signals have controlled and/or substantially zero delay with respect to said second reference signal.

15. (ORIGINAL) The method according to claim 14, wherein said second reference signal is phase locked to said first reference signal.

16. (ORIGINAL) The method according to claim 14, wherein step A further comprises the step of dividing said first reference signal by N.

17. (ORIGINAL) The method according to claim 14, wherein step A comprises the step of generating said second reference signal using a digitally controlled reference loop circuit.

18. (ORIGINAL) The method according to claim 17, wherein step A further comprises the step of adjusting a phase of said second reference signal in response to said first and second reference signals.

19. (ORIGINAL) The method according to claim 14, wherein said first reference signal comprises an external timing signal.

20. (CANCELED).

21. (CURRENTLY AMENDED) An apparatus comprising:

a first circuit configured to generate a second reference signal in response to (i) a first reference signal and (ii) a timing signal, wherein (a) a frequency and a phase of said second reference signal are (i) adjusted in response to said first reference signal and (ii) held when said first reference signal is lost and (b) said first reference signal comprises an external timing signal, wherein said first circuit comprises a digitally controlled reference loop circuit; and

a second circuit configured to generate one or more output signals in response to said second reference signal and one of said one or more output signals, wherein (i) said one or more output signals have a controlled and/or substantially zero delay with respect to said first reference signal and (ii) said second circuit comprises (a) a phase locked loop (PLL) circuit configured to generate a clock signal in response to said second reference signal and said one of said one or more output signals, and (b) a buffer circuit configured to generate said one or more output signals in response to said clock signal and (c) a divide-by-N circuit configured to divide said one of said one or more output signals.